What is claimed is:

1. A method of color correction, comprising:

selecting gamut boundary signals from a gamut in a device independent color space (DICS);

dividing the gamut into a set of triangles representing a gamut shape in the device independent color space (DICS);

intersecting the gamut with a first predetermined number of planes which are perpendicular to an a*b* two-dimensional space and intersect each other on an L* axis;

dividing each plane into a second predetermined number of radial unit vectors;

selecting each plane and each unit vector that are separated at a predetermined angle; and

determining an intersection point between a gamut boundary and each selected unit vector, by using a ray-triangle-inclusion test.

2. The method of claim 1, further comprising:

defining a gamut mapping direction according to sizes of a source gamut and a reproduction gamut, in which the gamut mapping direction proceeds from a gamut having a smaller size to a gamut having a larger size.

3. The method of claim 1, wherein the first predetermined number is 360.

4. The method of claim 1, wherein said second predetermined number is 180.

5.   A method of color correction after gamut mapping, comprising:

regenerating a gamut shape in a device independent color space (DICS) into a predetermined structure represented in a three-dimensional space;

dividing the structure of the gamut shape represented in the three-dimensional space into planes;

connecting respective points in a set of points created by intersection of the gamut shape with the planes;

14

calculating a color value of each point;

determining whether a structure formed of points to be color-inverse-transformed includes points generated by the gamut-plane intersection; and

performing a color inverse transformation process by linear interpolation in the structure.

6. The method of claim 5, wherein:

the regenerated gamut shape is represented in the three-dimensional space by a set of tetrahedrons, cubes, pyramids, prisms, or lines.

7. The method of claim 5, wherein the connecting of the respective points comprises:

performing a Delaunay triangulation algorithm.

8. The method of claim 5, wherein the calculating of the color value comprises:

performing a linear interpolation between vertexes of the structure of the gamut shape represented in the three-dimensional space.

9. The color correction method of claim 5, wherein the determining of whether a structure includes points generated by the gamut-plane intersection comprises:

performing a point-triangle-inclusion test for determining whether a triangle including points to be color-inverse-transformed includes points generated by the gamut-plane intersection.

10. The color correction method of claim 9, wherein the performing of the color inverse transformation, comprises

performing a linear interpolation in the triangle.

11. The color correction method of claim 10, wherein the performing of the linear interpolation comprises:

providing coordinate values of the points to be color-inverse-transformed and color values of the respective vertexes of the triangle.

12. A method of correcting a source device color into a target device color, the method comprising:

obtaining an array of color points of a source device represented in a predetermined color space;

obtaining an array of color points of a target device represented in the same color space;

producing gamut descriptors of the source device and the target device;

gamut-mapping the color point array of the source device into that of the target device; and

performing a color inverse transformation process to thereby calculate an RGB value for the gamut-mapped point arrays.

13. The method of claim 12, wherein the predetermined color space is an L*a*b* coordinate system.

14. The color correction method of claim 12, wherein the producing of the gamut descriptors comprises:

reading an array of the points represented in the color space;

reading a grid parameter in the color space;

selecting a square forming the grid;

dividing the square into two triangles;

storing coordinates of the vertexes of each triangle;

producing a unit vector (line) having a start point and a predetermined rotational angle;

detecting intersection points between the two triangles and the unit vector; and

detecting points having the maximal chromaticity among the intersection points within a current gamut boundary, in which the gamut is divided into planes arranged at predetermined angles.